

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application.

#### **Listing of Claims:**

Claim 1 (Currently Amended): A method comprising:

receiving a multicast message from a remote storage device;  
detecting the attachment of [[a]] the remote storage device to a network in  
response to receiving the multicast message; and  
automatically incorporating storage capacity of the remote storage device into a  
logical storage volume.

Claim 2 (Original): The method of claim 1, wherein incorporating the storage capacity  
comprises incorporating the storage capacity into an existing logical volume.

Claim 3 (Original): The method of claim 1, wherein incorporating the storage capacity  
comprises incorporating the storage capacity into a new logical volume.

Claim 4 (Original): The method of claim 1, further comprising automatically expanding a size  
of a storage space provided by a file system to include the storage capacity.

Claim 5 (Original): The method of claim 1, wherein incorporating the storage capacity  
comprises incorporating the storage capacity according to one or more pre-defined policies.

Claim 6 (Original): The method of claim 5, wherein incorporating the storage capacity  
comprises:

forming a network-based connection with the remote storage device;  
creating a physical volume for the remote storage device; and  
adding the physical volume to a volume group.

Claim 7 (Original): The method of claim 5, further comprising selecting the volume group from a number of volume groups based on one of the pre-defined policies.

Claim 8 (Original): The method of claim 1, wherein detecting the attachment of the remote storage device comprises intercepting a request from the remote storage device for an Internet Protocol (IP) address.

Claim 9 (Cancelled).

Claim 10 (Original): The method of claim 1, wherein incorporating the storage capacity comprises automatically controlling a logical volume manager (LVM) in response to the detected remote storage device.

Claim 11 (Currently Amended): The method of claim ~~[[8]]~~ 10, wherein automatically controlling the LVM comprises:

instantiating a network driver to form a network-based connection with the remote storage device;

directing the LVM to create a physical volume for the remote storage device as if the remote storage device were local to the LVM; and

directing the LVM to add the physical volume to a volume group.

Claim 12 (Currently Amended): A computer-readable medium having instructions contained therein for causing a programmable processor to:

receive a multicast message from a remote storage device;

detect the attachment of ~~[[a]]~~ the remote storage device to a network in response to receiving the multicast message; and

automatically incorporate storage capacity of the remote storage device into a logical storage volume.

Claim 13 (Original): The computer-readable medium of claim 12, wherein the instructions cause the processor to incorporate the storage capacity into an existing logical volume.

Claim 14 (Original): The computer-readable medium of claim 12, wherein the instructions cause the processor to incorporate the storage capacity into a new logical volume.

Claim 15 (Original): The computer-readable medium of claim 12, wherein the instructions cause the processor to automatically expand a size of a storage space provided by a file system to include the incorporated storage capacity.

Claim 16 (Original): The computer-readable medium of claim 12, wherein the instructions cause the processor to incorporate the storage capacity according to one or more pre-defined policies.

Claim 17 (Original): The computer-readable medium of claim 12, wherein the instructions cause the processor to:

- form a network-based connection with the remote storage device;
- create a physical volume for the remote storage device; and
- add the physical volume to a volume group.

Claim 18 (Original): The computer-readable medium of claim 17, wherein the instructions cause the processor to select the volume group from a number of volume groups based on a pre-defined policy.

Claim 19 (Original): The computer-readable medium of claim 12, wherein the instructions cause the processor to intercept a request from the remote storage device for an Internet Protocol (IP) address.

Claim 20 (Cancelled)

Claim 21 (Original): The computer-readable medium of claim 12, wherein the instructions cause the processor to automatically control a logical volume manager (LVM) in response to the detected remote storage device.

Claim 22 (Original): The computer-readable medium of claim 21, wherein the instructions cause the processor to:

    instantiate a network driver to form a network-based connection with the remote storage device;

    direct the LVM to create a physical volume for the remote storage device as if the remote storage device were local to the LVM; and

    direct the LVM to add the physical volume to a volume group.

Claim 23 (Currently Amended): A system comprising:

    a logical volume manager (LVM) executing in an operating environment provided by a computer;

    a network attached storage (NAS) sensing module configured to receive a multicast message from a remote storage device and detect the attachment of [[a]] the remote storage device to a network in response to receiving the multicast message; and

    a NAS management module configured to interact with the LVM and automatically incorporate storage capacity of the detected remote storage device into a logical storage volume.

Claim 24 (Original): The system of claim 23, wherein the NAS management module directs the LVM to incorporate the storage capacity into an existing logical volume.

Claim 25 (Original): The system of claim 23, wherein the NAS management module directs the LVM to incorporate the storage capacity into a new logical volume.

Claim 26 (Original): The system of claim 23, wherein the NAS management module automatically expands a size of a logical storage space provided by the operating environment to include the storage capacity of the remote storage device.

Claim 27 (Original): The system of claim 23, further comprising a policy manager to define one or more policies for incorporating the storage capacity of the remote storage device.

Claim 28 (Original): The system of claim 23, wherein the NAS management module directs the LVM manager to incorporate the storage capacity by forming a network-based connection with the remote storage device, creating a physical volume for the remote storage device and adding the physical volume to a volume group.

Claim 29 (Original): The system of claim 28, wherein the NAS management module selects the volume group from a number of volume groups based on the policies defined by a policy manager.

Claim 30 (Original): The system of claim 29, wherein the NAS sensing module intercepts a request from the remote storage device for an Internet Protocol (IP) address.

Claim 31 (Original): The system of claim 23, wherein the computer is configured to maintain a pool of IP addresses and conform to the Dynamic Host Configuration Protocol (DHCP), and further wherein the NAS sensing module is configured to intercept a request from the remote storage device for an IP address.

Claim 32 (Cancelled).

Claim 33 (Original): The system of claim 23, wherein the NAS management module is configured to automatically instantiate a network driver to form a network-based connection with the remote storage device, direct the LVM to create a physical volume for the remote storage

device as if the remote storage device were local to the LVM and directing the LVM to add the physical volume to a volume group.

Claim 34 (Currently Amended): A system comprising:

a network attached storage (NAS) device; and

a NAS master remotely coupled to the NAS device via a first network and configured to automatically incorporate storage capacity of the storage device into a logical storage volume ~~when the NAS storage device is attached~~ upon detecting the attachment of the NAS storage device to the first network.

Claim 35 (Original): The system of claim 34 further comprising a client computer coupled to the NAS master via a second network and configured to access the logical storage volume.

Claim 36 (Original): The system of claim 34, wherein the NAS master is configured to automatically expand a size of a storage space mapped to the logical volume.

Claim 37 (Original): The system of claim 34, wherein the NAS master comprises a policy manager to define one or more policies for incorporating the storage capacity.

Claim 38 (Original): The system of claim 34, wherein the NAS master is configured to maintain a pool of IP addresses and conform to the Dynamic Host Configuration Protocol (DHCP).

Claim 39 (Currently Amended): A method comprising:

detecting the attachment of a remote storage device to a network;

adding ~~[[a]]~~ the remote storage device to ~~[[a]]~~ the network in response to detecting the attachment of the remote storage device; and

incorporating the storage capacity of the remote storage device into the network without substantial human intervention.

Claim 40 (Cancelled).

Claim 41 (Original): The method of claim 39, wherein incorporating the storage capacity comprises incorporating the storage capacity into an existing logical volume.